

## ABSTRACT OF THE DISCLOSURE

A microfluidic analysis system with a flow channel block, possessing at least one recessed channel, clamped to a sensor surface, such as a surface plasmon resonance (SPR) sensor. Flatness and hardness lead to a liquid leak-proof seal. Surface tension forces prevent liquid from leaking between the flow cell block and sensor surfaces. The fluid channels formed are reversible upon removal of the clamping pressure.